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EXAMINER

STULBERGER, CAS P

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/944,893
Filing Date: August 31, 2001
Appellant(s): REINOLD ET AL.

Thomas V. Miller, Reg. No. 42,002
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/27/2005.

RD

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows: Claims 1-7, 9-12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse. Claims 8, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse as applied to claims 1-7, 9-12, and 15 above, and in further view of U.S. Patent No. 5,991,401 to Daniels et al.

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These changes reflect that not all of the claims are rejected under both Pogue in view of Daniels and Pogue in view of Daniels and Wright. In addition new grounds of rejection is presented in view of the newly submitted prior art references.

(7) *Grouping of Claims*

The rejection of claims 1-15 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

5,499,247	Pogue Jr.	11-1999
5,940,372	Daniels	11-1999
6,101,599	Wright	8-2000

(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1-4, 6, and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of U.S. Patent No. 5,991,401 to Daniels et al.

In regards to claims 1-4, 9-12, and 15, Pogue Jr. discloses data network capable of transmitting audio, video, data, low-bandwidth control data, and other similar signals (Pogue: column 1, lines 6-9). Pogue gives an example of connecting a remote CD player (first device) and an audio processor/amplifier (second device) with the existing network. Both the CD player and the audio processor/amplifier can be configured to interface with the network data bus at the network data rate while at the same time interfacing with the CD player and audio processor (Pogue: column 3, lines 39-55). This meets the limitation of “a first device and second device and an active network communicatively coupling the first device and the second device for the communication of data between the first device and the second device.” Pogue also discloses that preferred operating environment is a transportation vehicle such as a car, van, truck, bus, train, or airplane (Pogue: column 7, lines 1-3). Pogue however does not disclose encrypting the data..

Daniels et al discloses a network in which a packet is encrypted with an encryption key before it is sent out (Daniels: column 3, lines 45-51). This meets the limitation of “wherein the data packets are individually encrypted.” The receiving computer decrypts the incoming packet that is encrypted (Daniels: column 3, lines 56-63). This meets the limitation of “the active network being operable to encrypt the data.”

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the method of encrypting packets being sent in a network with the method as disclosed by Daniels in order to

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provide an improved method and system for providing data security in a computer system

(Daniels: column 1, lines 65-67).

In regards to claims 8, 13, and 14, Pogue however does not disclose error detection based on encryption. Daniels discloses that an incoming packet is decrypted and then encrypted utilizing an encryption key identical to an encryption key employed by the client. The encrypted packet is determined as to whether it is identical to the incoming packet. Any such packet that does not meet this criterion is rejected (Daniels: column 2, lines 5-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the method of error detection as disclosed by Daniels in order to reject potentially harmful packets (Daniels: column 4, lines 48-53).

In regards to claim 6, Pogue does not disclose a bridge. Daniels however discloses the CPU, ROM, and DRAM are also coupled to a PCI local bus of the computer of system through a PCI host bridge (Daniels: column 2, lines 58-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the bridge of Daniels in order to provide a high bandwidth path allowing PCI devices to directly access DRAM (Daniels: column 2, lines 64-65).

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3. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of U.S. Patent No. 5,991,401 to Daniels et al and in further view of U.S. Patent No. 6,101,599 to Wright et al.

In regards to claims 5 and 7, Pogue however does not disclose a switch or a router. Wright discloses a network with a switch and a router (Wright: Figure1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the switch and router of Wright in order to accomplish path switching and forwarding decision capabilities of packets in a network (Wright: column 2, lines 45-61).

New Grounds of Rejection

New grounds of rejection are necessitated by newly disclosed references in Appendices to Appeal Brief.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 9-12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse.

In regards to claims 1-7, 9-12, and 15, Pogue Jr. discloses data network capable of transmitting audio, video, data, low-bandwidth control data, and other similar signals (Pogue: column 1, lines 6-9). Pogue gives an example of connecting a remote CD player (first device) and an audio processor/amplifier (second device) with the existing network. Both the CD player and the audio processor/amplifier can be configured to interface with the network data bus at the network data rate while at the same time interfacing with the CD player and audio processor (Pogue: column 3, lines 39-55). This meets the limitation of “a first device and second device communicatively coupling the first device and the second device for the communication of data between the first device and the second device.” Pogue also discloses that preferred operating environment is a transportation vehicle such as a car, van, truck, bus, train, or airplane (Pogue: column 7, lines 1-3). Pogue however does not disclose encrypting the data or “an active network.”

Tennenhouse discloses an active network (Tennenhouse: page 1, left column, Introduction, second paragraph). Tennenhouse also discloses additional security such as encryption (Tennenhouse: page 3, left column, first line).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the method of encrypting packets being sent in a active network as disclosed by Tennenhouse in order to allow the network to perform customized computation on the user data (Tennenhouse: page 1, left column, Introduction, second paragraph).

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6. Claims 8, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,995,512 to Pogue Jr. in view of "Towards an Active Network Architecture" by David L. Tennenhouse as applied to claims 1-7, 9-12, and 15 above, and in further view of U.S. Patent No. 5,991,401 to Daniels et al.

In regards to claims 8, 13, and 14, Pogue however does not disclose error detection based on encryption. Daniels discloses that an incoming packet is decrypted and then encrypted utilizing an encryption key identical to an encryption key employed by the client. The encrypted packet is determined as to whether it is identical to the incoming packet. Any such packet that does not meet this criterion is rejected (Daniels: column 2, lines 5-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the vehicle network as disclosed by Pogue with the method of error detection as disclosed by Daniels in order to reject potentially harmful packets (Daniels: column 4, lines 48-53).

(11) *Response to Argument*

Applicant argues that Pogue Jr. does not disclose an active network and neither Daniels nor Wright cure this deficiency. In reply, the specific physical structure for the "active network" is not claimed, and the specification does not set out any special definition with reasonable clarity, deliberateness, and precision. According to page 8 of the specification, an active network may include a plurality of active elements enabling communication paths. The active network may be based on packet data principles, and the active network may incorporate a fabric of active network elements. It is clear that the terms "active network" are not defined in the

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specification reasonable clarity, deliberateness, and precision. See *Telejlex Inc. v. Ficosa North America Corp.*, 229 F.3d 1313, 13256, 63 USPQ2d 1374, 1381 (Fed. Cir. 2002.), *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342, 60 USPQ2d 1851, 1854 (Fed. Cir. 2001) and MPEP 2101.01.

As best determined by the specification, active network is determined to mean that active network element is used broadly in connection with the definition of the fabric to include “any number of intelligent structures for communicating data packets...without an arbiter or other network controller...” (Specification, page 9, lines 16-19). This is an alternate embodiment as disclosed by the applicant in the Specification and is the best possible indication of a definition of an active network. Pogue Jr. discloses a fiber optic data bus arranged in a star topology configuration, which comprises a plurality of devices or nodes and placed in communication with the bus. Intelligent devices may be among those types of devices placed in communication with the bus. For those devices, the interface may allow some of the network-related function to be performed by the device itself (Pogue: Abstract). This meets the definition of an active network as defined in the specification.

For the above reasons, it is believed that the rejections should be sustained.

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CS

Cas Stulberger
August 5, 2005

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Respectfully submitted,

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